The Selfloading Rifle

HK 91

Cal. .308

1. General Information

The Selfloading Rifle HK 91 is the non-military design of the well-known Automatic Rifle G3, adopted as standard weapon by the Deutsche Bundeswehr (Federal German Armed Forces) and the armed forces of several other nations. The HK 91 is like the G3 a recoil operated weapon incorporating a delayed roller locked bolt system and designed for semi-automatic fire. The cartridges are fed from a 20-round magazine.

The HK 91 excels particularly because of its excellent firing accuracy.

A telescopic sight with mount can easily be attached to the already existing receiving means of the Rifle HK 91.

HECKLER & KOCH GMBH

7238 OBERNDORF/NECKAR GERMANY

Loading

- Set selective fire lever at "S" = safe.
- Retract cocking lever engaging it in the recess of the cocking lever housing.
- Insert filled magazine into the magazine well until the magazine catch locks magazine into position.
- Let cocking lever snap forward.

The rifle is loaded and "safe".

Firing

- Disengage the safety.
- Pull the trigger.

Engage the safety whenever firing is interrupted or completed.

Unloading

- Check to make sure that the selective fire lever is at "S" = safe.
- Remove magazine by pushing magazine catch button to the left.
- Retract cocking lever.
- Check to make sure whether chamber is empty.
- Let cocking lever snap forward.
- Disengage the safety.
- Pull the trigger.
- Engage the safety.

Stripping the Rifle for Cleaning

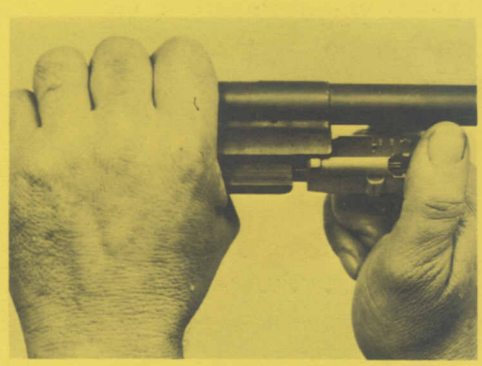
The Rifle HK 91 is stripped and re-assembled without any tools.

Before Stripping the Rifle: Put at "safe"!

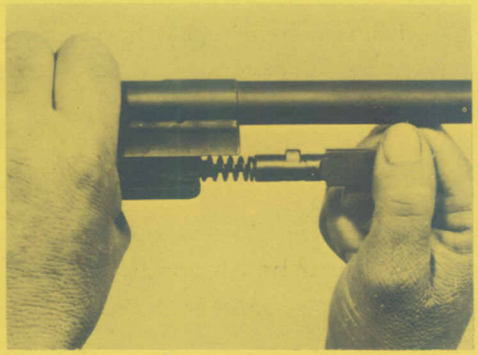
- Remove magazine.
- Unload rifle.
- Unhook carrying sling at front eyebolt.
- Remove back plate with butt stock.
- Remove grip assembly.
- Retract bolt assembly by means of the cocking lever and remove the bolt to the rear.
- Push cocking lever forward.

Stripping the Bolt Assembly

To strip the bolt assembly grasp the bolt head carrier with one hand, rotate the bolt head with the other hand and pull it from the locking piece.



Strip bolt assembly



Remove locking piece with firing pin and firing pin spring

Rotate locking piece slightly. This will free the firing pin and firing spring which can then be removed together from the bolt head carrier.

The bolt is re-assembled in reverse sequence. Care should be taken with the following:

- Push locking piece with its stud into the recess in the bolt head carrier as far as it will go and rotate approx. 90° towards the check lever.
- Push bolt head onto the locking piece in such a manner that the tapered surface of the bolt head stops in front of the nose of the check lever.
- Push bolt head against the pressure of the check lever spring as far as it will go. Pull the bolt head forward approx. 1/4" (approx. 5 mm) in this position.
- Rotate the bolt head until its base is even with the base of the bolt head carrier.

Re-assembling of the Rifle

The rifle is re-assembled in reverse sequence. Insert the re-assembled bolt into the receiver. The locking rollers must be withdrawn in the bolt head. Check the proper assembly of the rifle by pulling back and releasing the cocking lever several times.

Cleaning

For cleaning, the weapon must be disassembled as stated. The barrel must be cleaned after each firing. Each shooter will duly clean his weapon if it has not been used for a longer period.

For cleaning and preservation any sort of gun oil in normal commercial usage can be used.
Prior to every shooting the barrel has to be freed from oil by a clean pull-through.

The Sights consist of the stationary front sight in the front sight holder and the rotary rear sight which is adjustable for windage and elevation. The sight cylinder with V-notch and diopter holes is graduated from 1 - 4. Figure "1" is the V-notch and figures "2, 3 and 4" are the diopter holes. The settings "2, 3 and 4" correspond to the distances 200, 300 and 400 m.

Adjusting the Rotary Rear Sight

If a re-setting is necessary, it is done only by adjustment of the rear sight in elevation or windage.

Elevation Adjustment

Insert elevation adjustment tool in the rear sight cylinder so that the wedges of the elevation adjustment tool gear into both grooves of the rear sight cylinder. Insert cross slit screw driver into the elevation adjustment tool and depress. Turn rear sight cylinder manually in the desired direction (at clockwise rotation the point of impact is lowered, at counter-clockwise rotation it raises 3.3 cm at 100 m per notch). After correction remove cross slit screw driver and elevation adjustment tool. Again the catch bolts engage in the two grooves.

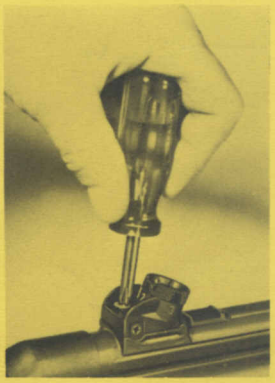
Elevation adjustment

Windage adjustment

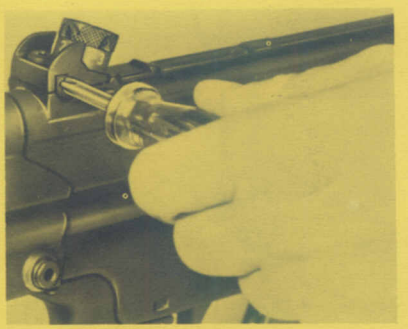
Point of impact to the left: Loosen clamping screw. Turn adjusting screw counter-clockwise as required. Re-tighten clamping screw.

Point of impact to the right: Loosen clamping screw. Turn adjusting screw clockwise to make necessary correction. Re-tighten clamping screw.

Note: Each revolution of the adjusting screw moves the mean point of impact at a distance of 100 m 13.2 cm in either direction.



Loosen clamping screw



Turn adjusting screw

Specifications

Length of rifle	40.15 in.
Length of barrel	17.55 in.
Sight radius	22.52 in.
Weight of rifle without magazine	9.63 lbs.
Weight of magazine filled with 20 cartridges	1.32 lbs.
Telescopic sight	Hensoldt 4 x 24
Telescopic sight mount	HK spec. mount

Accessories

Carrying sling
Rear Sight adjusting tool
Telescopic sight with mount
Cleaning kit